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DATE: DD MM YYYY

DRAFT/FINAL
Operational Requirements Document
Document #

Program Name

ACAT Level XX

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OPR:	Name
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CAF XXX-XX-X

OPERATIONAL REQUIREMENTS DOCUMENT (ORD)
FOR
PROGRAM NAME

1. General Description of Operational Capability (POC: AoA Study Lead)
1.1 Overall Mission Area
- What are the overall Mission Areas supported by this system (give DoD mission area number)?
- Describe how the system will affect these mission areas.

1.2 Type of System Proposed
- What type of system (munition, missile, aircraft, launch vehicle, etc) is the user proposing to meet operational requirements?
- What capabilities will the system have?
- What other systems will the system interact with?

1.3 Operational and Support Concepts
- What is the general concept of operations (CONOPs) envisioned for this system?
    - How will it interact with US/allied forces?
    - How will it engage/avoid enemy forces?
- What is the general support structure envisioned for this system?
    - How will it interact with current support systems?
    - What new support systems/procedures will be required?

1.4 Mission Need Statement (MNS) Summary
- What are the MAJCOM MNS which led to this ORD (including MAJCOM numbers)?
- Summarize the MNS.
- If no MNS preceded this ORD explain the process that investigated alternatives for satisfying the mission need and developing operational requirements.

2. Threat (POC: User Command's Directorate of Intelligence)
- What are the potential enemy capabilities – doctrine, strategy, tactics, organization, equipment, and military forces – that could defeat, degrade, or destroy proposed system effectiveness?
- What are the HQ USAF/IN approved and DIA validated threat references used to develop this section?
- If the program is ACAT I, what is DIA validated System Threat Assessment Report (STAR)?

2.1 Operational Threat Environment
2.1.1 Initial Operational Capability (IOC)
- What is the general threat environment that the system will be working in at IOC?
    - What threats will exist that could affect this system?
    - How will these threats affect it?
    - How stressing will the threat environment be?
- Provide multiple environments which could exist at IOC

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2.1.2 IOC+10 years
- What is the general threat environment that the system will be working in at IOC + 10?
  - What threat will exist that could affect this system?
  - How will these threats affect it?
  - How stressing will the threat environment be?
- Provide multiple environments which could exist at IOC +10

2.2 System Specific Threats

2.2.1 IOC
- What threats will be targeted directly against this system at IOC?
- What affect will these threats have on the system?

2.2.2 IOC+10
- What threats will be targeted directly against this system at IOC+10?
- What affect will these threats have on the system?

2.3 Reactive Threat
- What threats will be developed as a direct result of the deployment of this system?
- How will these threats affect the system?

2.4 Targets
- What are the targets this system will engage?
- What are the characteristics of these targets?
- What information about these targets will the system require to perform adequately?

3. Shortcomings of Existing Systems (POC: User Command)
- What are some current systems (Do not discuss proposed systems) in the same mission area that cannot meet the current or projected requirements?

3.1 System Type 1 … N
- Why can't System/System Type 1 meet current or projected requirements?

4. Capabilities Required (AoA Study Lead, User Command)
- What, in operational terms, are the general capabilities of the system?
- List all the Measures Of Effectiveness (MOEs) and Measures Of Performance (MOPs) identified in the AoA process.

4.1 System Performance (AoA Study Lead, User Command)
- What are the system performance parameters (i.e. mission planning needs, range, accuracy, accuracy, payload, speed, mission reliability, etc)?
- NOTE: These should tie closely with the MOPs listed above.
- Are there any Seek Eagle (SE) needs or requirements that this new system must have?
- What is the expected mission capability (full, % degraded, etc) through the environments and threat scenarios?

4.1.1 Parameter 1 … N
- Describe the parameter.
- What is the required THRESHOLD value (minimum acceptable operational value) that must be attained for this parameter?

- What is the OBJECTIVE value (value beyond the threshold having a measurable, beneficial impact) that must be attained for this parameter?
- Is this parameter a Key Performance Parameter?
- What are the mission scenario, employment tactics and environmental conditions which affect this parameter?
- Is this an item of critical information which must be specially protected from enemy intelligence collection?

4.2 Logistics and Readiness (AFI 10-601) (POC: User Command's Logistics Directorate)

- What are the logistics and readiness parameters (i.e. mission capable rate, operational availability, frequency, duration of maintenance activities, etc)?
- NOTE: These should tie closely with the MOPs listed above.
- Are there any Seek Eagle (SE) needs or requirements that this new system must have?
- What are the combat support requirements? (AFI 10-602)

4.2.1 Parameter 1 … N

- Describe the parameter.
- What is the required THRESHOLD value (minimum acceptable operational value) that must be attained for this parameter?
- What is the OBJECTIVE value (value beyond the threshold having a measurable, beneficial impact) that must be attained for this parameter?
- Is this parameter a Key Performance Parameter?
- Is this an item of critical information which must be specially protected from enemy intelligence collection?

4.3 Critical System Characteristics (POC: AoA Lead, User Command)

- Are there any system characteristics not included in the last two sections, but critical to the system?
- Some possible parameters are listed
    - Electronic counter-countermeasures (ECCM) requirements
    - Wartime Reserve Modes (WARM) requirements
    - Conventional survivability
    - Initial nuclear weapons effects survivability
    - Nuclear, Chemical, Biological (NBC) survivability
    - Natural environmental factors
    - Electromagnetic compatibility
    - Frequency spectrum assignment
    - System, nuclear, explosive, flight safety parameters
    - Communications, information, physical and operational security needs?
- Is this characteristic a Key Performance Parameter?

4.3.1 Parameter 1 … N

- Describe the parameter.
- What is the required THRESHOLD value (minimum acceptable operational value) that must be attained for this parameter?
- What is the OBJECTIVE value (value beyond the threshold having a measurable, beneficial impact) that must be attained for this parameter?

- Is this parameter a Key Performance Parameter?
- Is this an item of critical information which must be specially protected from enemy intelligence collection?

5 Integrated Logistics Support (ILS) (POCs: AoA lead, SPO, ACC/LG)
- What are the organizational, intermediate, and depot level support objectives for IOC? (AFI 10-602)
- What are the organizational, intermediate, and depot level support objectives for FOC? (AFI 10-602)
- Reference the Integrated Logistics Support Plan (ILSP) if it exists.

5.1 Maintenance Planning (POCs: SPO, ACC/LG)
- What are the maintenance tasks to be performed?
- What is the time phasing for depot maintenance (including programmed depot maintenance and surveillance inspections)?
- What is the planning approach for contract vs organic repair?
- What is the maintenance strategy for repairable, commercial non-developmental items (NDI)?

5.2 Support Equipment (POCs: SPO, ACC/LG)
- What is the standard support equipment to be used by this system?
- Does this maximize the use of NDIs and families of automated test equipment (ATE)? If not why?
- What are the test and fault isolation capabilities desired of the ATE at all levels (express in terms of realistic and affordable probabilities and confidence levels)?
- Will a support equipment requirement document (SERD) be developed in accordance with AFR 800-12? If no, why not?

5.3 Human Systems Integration (HIS) (POCs: ACC/LG, ACC/DO, ACC/SE)
- Briefly describe the operational and maintenance training concept (pipeline, training devices, embedded training, onboard training, interactive courseware).
- What are the manpower, personnel, and training constraints?
- What are the thresholds and objectives for manpower (force structure and end strength), personnel (numerical and skill level), training and safety?
- What are the manpower and training methodologies to be used?

5.4 Computer Resources (POC: ACC/SC)
- What are the computer resource constraints (i.e. language, hardware, database architecture, or interoperability constraints)?
- What are the mission critical and support computer resources (including ATE)?
- What are the capabilities desired for integrated computer resources support?
- Are there any unique user interface requirements, documentation needs, and special software certifications?

5.5 Other Logistic Considerations (POCs: ACC/CE, ACC/LG, ACC/SE, SPO)
- What is the provisioning strategy for the system?
- Are there any special packaging, handling or transportation considerations?
- What are the unique data requirements (i.e. engineering data for depot support or technical orders for the system and depot)?
- Include the Computer-aided Acquisition Logistics Support (CALS) requirements for technical data.

- What is the required use of hazardous materials? Has this been minimized to the greatest extent possible? If not why?
- See AFPD 21-3, AFPD 24-6, AFR 71-1, and AFR 80-18 for more information.

6   Infrastructure Support and Interoperability
- Discuss interfacing systems at the system or subsystem, platform, and force levels.
- Describe the interfacing systems (specifically those categories listed below)?
- What are the companion ORDs for these systems?
- Do the other services have similar requirements?
- What is the joint potential designator (Joint, Joint Interest or Independent)

6.1 Command, Control, Communications, and Intelligence (POCs: ACC/DR, ACC/IN)
- How will the system be integrated into the C^3I architecture which will exist at IOC?
- What are the data (voice, data, and video), computer network support, and antijam requirements?
- What are the unique Intelligence requirements (including intelligence interfaces, communications and data base support, threat data, etc)?
- What are the electromagnetic spectrum resources required by the system (e.g., general location in the spectrum, bandwidth required, etc)?
- Reference the system's intelligence support requirements in the Intelligence Support Plan (ISP).

6.2 Transportation and Basing (POCs: ACC/LG, SPO)
- How will the system be moved to and in the theater?
- Are there any lift constraints?
- What are the main and forward basing requirements and the associated facilities needed for training?

6.3 Standardization, Interoperability, and Commonality POCs: ACC/LG and SPO)
- What are the considerations for joint use, NATO cross-servicing, etc?
- What are the procedural & technical interfaces, communications, protocols, and standards required to ensure operability with other Service, joint Service, and allied systems.
- What are the energy standardization and efficiency needs for both fuels and electrical power?

6.4 Mapping, Charting, and Geodesy Support (POC: ACC/IN)
- What are the cartographic materials, digital topographic data, and geodetic data needed for system employment?
- Is Defense Mapping Agency standard military data being used? If no, why not?
- Are current World Geodetic System Datums (i.e. WGS 84) being used? If no, why not?
- Contact HQ USAF/IN for waiver approval.

6.5 Environmental Support (POC: ACC/DOW)
- What standard & unique weather, oceanographic, and astrogeophysical support is required?
- What are the data accuracy and forecast requirements?

7 Force Structure (POCs: ACC/DO, ACC/XP)

- What are the number of systems or subsystems needed (include spares and training units)?
- What platforms (include AF, other service, and other agency) are required to employ (include prepositioning and disposal if required) this system?
- Were numbers of systems required for gained reserve component (Air National Guard and Air Force Reserve) included in the force structure estimate? If not why not? (AFI 10-301)

8 Schedule Considerations (POCs: ACC/DO, ACC/LG, ACC/XP)

8.1 Initial Operational Capability (IOC)

- What actions are required to allow the declaration of IOC?
- What exactly is the operational capability or level of performance necessary to declare IOC?
- What number of operational systems, operational and support personnel, facilities and organizational, intermediate, & depot support elements must be in place to declare IOC?
- What is the Required Assets Available (RAA) date, projected trial period, required organic support dates, etc required to declare IOC?
- Does IOC need to be accomplished by a certain timeframe? If so, what is the objective date for IOC? What are the consequences of not meeting this objective date?

8.2 Full Operational Capability (FOC)

- What actions are required to allow the declaration of FOC?
- What exactly is the operational capability or level of performance necessary to declare FOC?
- What number of operational systems, operational and support personnel, facilities and organizational, intermediate, & depot support elements must be in place to declare FOC?

8.3 Major Program Milestones

Milestone 0	MMM YY
Milestone I	MMM YY
Milestone II	MMM YY
Milestone III	MMM YY
RAA	MMM YY
IOC	MMM YY
FOC	MMM YY

REQUIREMENTS CORRELATION MATRIX (U)						
PART I					As of Date: DD MMM YYYY	
SYSTEM CAPABILIES AND CHARACTERISTICS	MNS		ORD I		ORD II	
	Thresholds	Objectives	Thresholds	Objectives	Thresholds	Objectives

System Capabilities and Characteristics Column
- List the system's general operational characteristics and capabilities outlined in Paragraph 4 of the ORD.
- Adjacent to each capability and characteristic, reference the paragraph in the ORD text from which it came.
- Any characteristic or capability with an associated threshold is a candidate for a key parameter and inclusion in the APB. The operating command should recommend key performance parameters for inclusion in the APB by marking the specific capability and (or) characteristic with an asterisk (*)

Thresholds and Objectives Columns
- Include the threshold and objective values for each of the characteristics and capabilities listed in the System Capabilities and Characteristics Column.
- The value for each threshold must be referenced in Part II, describing its relationship to mission success and how that value was derived.
- When a threshold or objective changes from an earlier ORD iteration, explain and give the rationale for the change in Part III of the RCM.
- Key performance parameters must have threshold and objective values (objectives may be the same as the thresholds when an operationally significant increment above the threshold is not identifiable or useful).

REQUIREMENTS CORRELATION MATRIX (U)
PART II
(Supporting Rationale for System Characteristics and Capabilities)

As of Date: DD MMM YYYY

Parameter X
- Cite specific studies, analyses, threat assessments, modeling, or other reference sources (including informed military judgments) that justify and substantiate thresholds for each system characteristic or capability.

Parameter Y

REQUIREMENTS CORRELATION MATRIX
PART III
(Rationale & Needs/Requirements Changes)

AS OF DATE: DD MMM YYYY

Parameter Y
- Show the rationale for changes in system characteristics, performance, and supporting parameters, etc. As appropriate, cite the report title, document number, supporting analysis, get-well date, and schedules, etc. Cite the date and who made the decision to change the threshold

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